

Catherine L. Mann, Senior Fellow,
Institute for International Economics
April 9, 2004

**Off-shore Outsourcing and Technology Jobs:
Rationale and Potential Role for the ‘Human-Capital’ Investment Tax Credit¹**

Regardless of evidence that puts the magnitude of off-shore outsourcing of technology jobs as small, the terms of the debate have been set. Proposed policies should address the dominant challenge—rapid technological change—rather than respond to the most hyped issue of off-shore outsourcing.

There are two related, but distinct, labor market challenges facing the US today, with complementary domestic strategies. One strategy focuses on workers whose careers and career paths have been eliminated by trade, technology, or other factors. The other focuses on the skill pipeline for workers whose careers still are viable, but where their specific skills no longer match well the jobs available in the US. (There is, in addition, an external strategy of promoting open markets abroad for competitive US capital goods and business/professional services. Both of these categories of trade run trade surpluses, continuing to increase in the case of business/professional services and falling to zero since 1997 in the case of capital goods. The external strategy is also important, but is a topic for another note.)

For those workers whose job and career path are gone for good, whether due to technology or trade, and whether production job in manufacturing or white-collar call-center job, a combination of extended unemployment benefits (which provides more time for career redirection), portability of benefits (such as health and pension), and wage insurance and training credits or vouchers is the way to go. In particular, wage insurance acknowledges that a new career path is required, and the sooner the worker transitions and starts working in that career and climbing the job ladder the better.² Training credits or vouchers address those who need help getting to the first rung of a new career ladder.

For the second set of workers, particularly those in technical fields, rapid technological change has coincided with increased international skill competition to result in a dramatic depreciation of existing technical skills. The technical career path remains viable for these US workers, but the match is poor between current skills and those demanded by firms in the US. The human-capital investment tax credit is one way to achieve a better-functioning skill pipeline of technical workers, addressing both incumbent workers and entry-level workers.³

¹ For background, see *Globalization of IT Services and White Collar Jobs: The Next Wave of Productivity Growth*, Institute Economics Policy Brief PB 03-11 December 2003, and ‘Global Sourcing and High-Tech Jobs: Productivity Gains and Policy Challenges,’ presentation at the Institute for International Economics, March 11, (www.iie.com). Additional references available on request

² See Lori G. Kletzer and Robert E. Litan (2002) *A Prescription to Relieve Worker Anxiety*, International Economics Policy Brief 01-02. Washington: Institute for International Economics.

³ The human capital investment tax credit was initially proposed in *Globalization of IT Services and White Collar Jobs: The Next Wave of Productivity Growth*

The technical skill pipeline is important for the US economy, particularly in the case of information technology and related disciplines, because the benefits of IT accrue when IT diffuses out into the economy at large. Since IT investment and IT workers are complements, an adequate pipeline of IT skilled workers diffused throughout the economy is necessary to obtain the full benefit of IT capital investment.

The human-capital investment tax credit recognizes three realities of the marketplace for technical skills in addition to the background of skill depreciation and competition. First: **free-riding**. With regard to incumbent workers, firms that engage in substantial training of their own workers to move their skills up the ladder beyond the threat of off-shore outsourcing face the disincentive of ‘free-riding’ by other firms that do not train, and poach talented and trained workers. Facing this probability that a trained worker will be poached, the firm does not train as much. Second: **entry-level uncertainty**. With respect to entry to the career pipeline, the first rung of the career path may no longer be done in the United States. Students, realizing that there is no first rung on the job ladders, will not train for the career, hence starving the pipeline of workers. An internship credit as part of the human capital investment tax credit package recognizes that firms need an incentive to bring in entry-level workers on a technical career ladder and students need incentives to take the entry-level job in a technical field. Third: **spillovers**. In both the case of the incumbent worker and the entry-level career rung, the ‘private benefits’ of a firm undertaking training or providing an internship is less than the ‘national benefits’ of training taking place. The country as a whole is better off with superior skill matches and more skilled workers. ‘Free-rider’, ‘spillovers’ are the classic economics cases for intervention into the market, and the entry-level uncertainty is a specific case of information asymmetries also warranting intervention.

Technical workers and firms that engage in incumbent training or internships would receive a tax credit either in the form of expensing more than 100 percent of the training cost (say 120 percent) or expensing 100 percent of the cost plus a reduction in tax payment of, say, 10 percent of the cost of training when the training or internship is complete and the next step on the job ladder achieved (either at that firm or a different one). The firm would not likely actually do any of the training, so the training money to the firm would flow through to educational institutions, such as community colleges. However, because the training would take place in the context of the firm’s overall strategic plan (which accounts for the global availability of skills) the benefits of targeted job training are more likely to accrue to the workers and to the US economy.

Implementing such a human-capital investment tax credit faces challenges similar to the R&D tax credit or accelerated depreciation schedules for IT investments. Yet, such tax credits are routinely used under similar rationales of ‘free rider’ and ‘spillovers,’ and have projected budgetary expenditures of \$50 billion over the next 10 years (CBO estimates). In today’s ‘knowledge economy’ built on enhanced use and diffusion of information and technology, the most important asset is people, thus the urgency to pursue a policy that explicitly promotes human-capital investment.